

Volume 22 Number 04

HILLES Computer Paper

Tree issue

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The Computer Paper Retrospective from:

Douglas Alder Graeme Bennett Sean Carruthers Duane Hass Andrew Moore-Crispin Dorian Nicholson David Tanaka

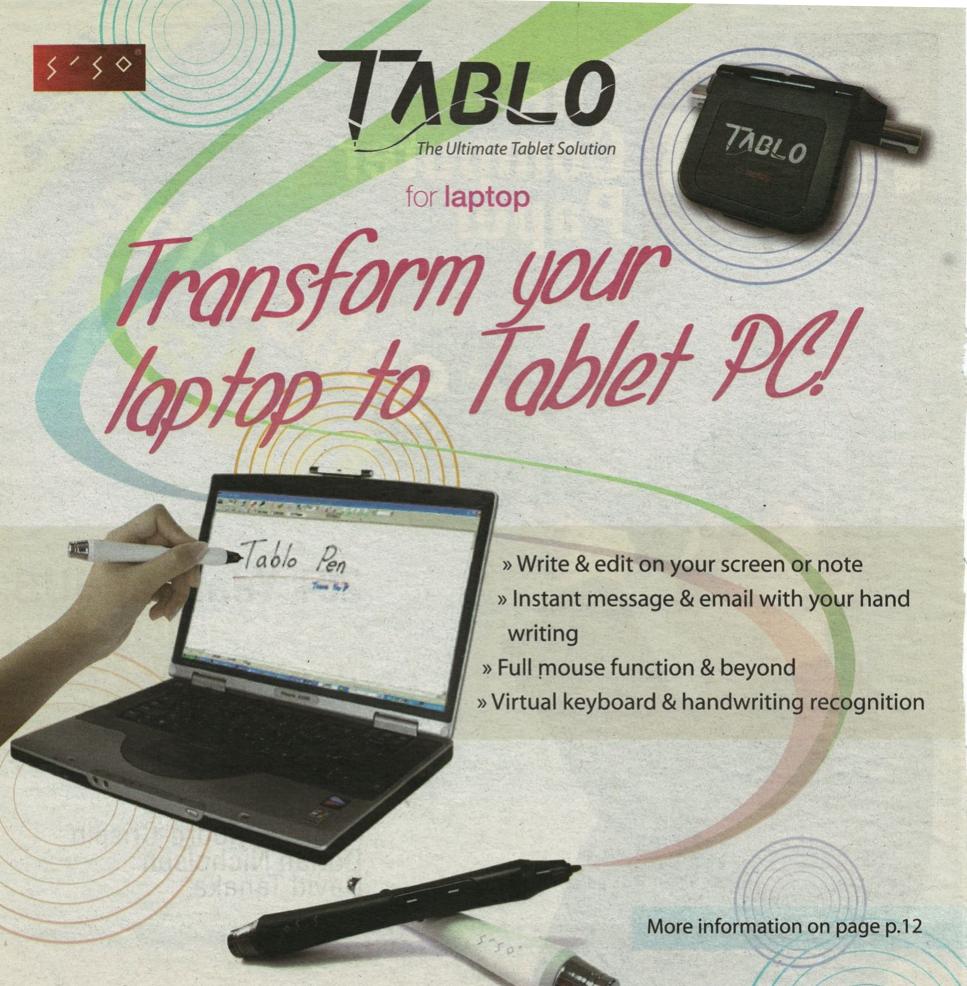












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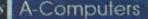
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Throughout the history of HUB: The Computer Paper and its various forms in the past there have always been several constants. We have always had a mandate that The Computer Paper contain as much quality information pertaining to the world of home computing and the various related technologies as possible. We have always attempted to give our readers the highest quality product possible so that they might enjoy The Computer Paper all

the more and share the news contained within with their friends and family. We have always done our best to ensure that our product be distributed across the country freely so that our readers could save their hard-earned money — possibly so that they could spend it on the products that we review. However, while we have enjoyed our role in providing you, our readers, with the stories, features and product reviews that shed a little bit of light on the technology industry, some things are bound to change.

The first two points, the fact that The Computer Paper has always stood for both computing news and for quality, those won't change. But the third, the fact that our product has always been free, that is something that we are unfortunately forced to alter as part of our own strategy for forging ahead in this stagnating economy. It is a shame not only for our readers, but for those of us who cherish the magazine that we work so hard on every month that we are forced to adopt a new plan of action. But this need not be the end.

Instead, we are calling for you, our valued readers, to subscribe to The Computer Paper and allow us to continue to serve you by working as hard as ever before on a magazine that still holds all the latest news on computing, peripherals and home office innovations. We will continue to produce a magazine of the highest quality possible for all of our valued readers and their families, but The Computer Paper will no longer be a product that is free of charge. As you'll read in the pages that follow, this comes after more than two decades of free publication and nationwide distribution, the news of countless major publications the world over folding as a result of a weakened economy, and the rise of the Internet as the average person's preferred source of information. Yet while many tech enthusiasts spend a great deal of their time looking for news online — possibly while on the road with some mobile broadband device; the Internet now has the ability to steal attention away even when readers are in transit — there is still a need for The Computer Paper, and many readers still prefer to do their reading while physically holding the paper that the words are printed on, as your reading this now proves. Yet more and more often, the cost of producing a magazine on paper outweighs the benefits of having tangible hard copy.

But enough of the situation, it's a story that has been told before by many publications before today and a story that will be retold by many more publications in the future. You have likely already made up your mind about how you feel about The Computer Paper and have already decided whether or not you are interested in subscribing (and if you haven't, I invite you to give it a shot). Our long-time readers all remember the life-altering developments that we have covered over the years and remember what TCP has meant to them, whether it was the advent of the Internet, the breaking of the megapixel barrier for digital cameras or the miniaturization of MP3 players. The Computer Paper has released hundreds of magazines dating back to the eighties, so we've covered it all.

Now, in this issue, our editors of past and present chip in to tell you what they thought were the greatest developments while they worked on The Computer Paper or its previous forms. We offer up a reflective piece from as many of the past editorial team as we could find, detailing what the paper has meant to each of us individually and what made this job such a joy to do. As the most recent editor to grace these pages, I offer up a retrospective summing up what The Computer Paper really stood for and how it all came about from start to, well, now. We sincerely hope that you enjoy this magazine and that you consider subscribing, if only for the convenience of seeing this great paper delivered to your door once a month. We stand by the quality of our product. It has opened our eyes to the potential and wonder that is the world of technology and made it a part of our lives. We hope that it will continue to do the same for you.

Hope to see you again soon. Dorian Nicholson

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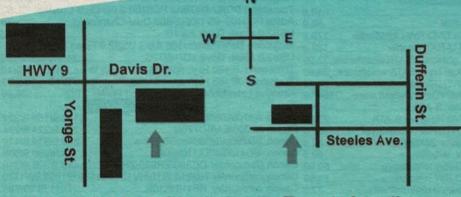
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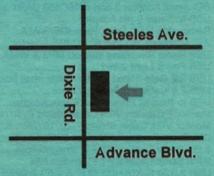
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(1440 x 900, 2ms, 8000:1,) SOLERIA-1380

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	2ms 8000:1 VGA/DVI199.99 Epson CD printer R280/1900/2400104.9/499.9/729	LG L1942T 4:3
CO 0/00 0/404 0 0 194 E 001 0000 01% 012M	00:1 VGA/DVI I	LG 19" W1942
60 00 0194 0174200 000111 55110 11111111111111111111111	050 2ms 8000:1	LG 20"WI 204
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240 0/400 0	0 5ms 2000:1HDMI359.9 Brother Color Laser 4040CN/4050CDN349.9/429.9	LG 24" L 246W
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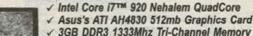
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The Feed

Gaming Giants Challenged by Cloud Console

The big three of the gaming industry are about to see a new challenger enter the ring in what could be a significant shake-up. Newcomer OnLive expects to steal some of the market away from Sony, Nintendo and Microsoft through its new system that operates "in the cloud." This means that while the console itself may be tiny, the majority of the processing power resides remotely at another location, beaming graphics to a player's television set almost instantaneously through a broadband connection.

The project has been underway for roughly seven years, but has recently gained the support of big name companies such as Electronic Arts, Take Two and Ubisoft. OnLive is expected to come out sometime in the near future at a price much more affordable than its competitors...

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Four Ways to Protect Yourself While Using E-mail

E-mail offers a great way to communicate with family, friends and co-workers, but it also has the potential to do harm. If used carelessly, those looking for someone to scam can find an easy target. Proper precautions must be taken when using email to make sure that personal information remains away from those who could abuse it. The only attachments that should be opened are those that come from a trusted source. Those that are sent from an unknown address have a greater chance of containing harmful viruses. Though viruses are rarely sent by a known contact, all email attachments should be opened with caution...

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Comparing the Many Editions of Windows Vista

Microsoft released several different versions of the Windows Vista operating system, a move that many computer users have found confusing. If you're considering switching over from XP to Vista, you'll have to consider which version of Vista you need. Windows Vista Home Basic includes all the necessities, but not much else. You can expect advanced security with Windows Defender and Windows Firewall, and of course, you'll be able to search for programs and files easily with Vista's handy start menu search bar. In the connectivity department, the OS comes with Internet Explorer 7, and the Network and Sharing center. All other versions of Vista contain these features, plus extra...

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Lok8u GPS Locator Finds Missing Kids

Lok8u's GPS locator, the Nu-M8, is set to provide child safety like never before. Disguised as a digital watch, the GPS unit is designed expressly for children and looks to reduce a parents concern over missing kids.

The Nu-M8 GPS locator fastens securely to your child's wrist and cannot be removed unless deactivated by you. Find your kids, anytime, anywhere. All you need is a mobile phone or a computer to find your child's precise location. The Nu-M8 allows kids the freedom to play in safety without visible adult supervision...

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Will North America Get Smart?

Only two years ago, it was very difficult to find solid research that pegged the market space for mobile banking and payments. Now the reports and studies are in the mainstream. Those who have been watching the market know that the time is ripe to go big or go home.

By 2011, the number of mobile phone subscribers that use their phones for mobile banking transactions will exceed 150 million globally, according to a new study by Juniper Research, "Mobile Banking Users to Exceed 150m" dated January 14, 2009. They say that over 70 per cent of the mobile banking user base will be in the far East, North America and Western Europe...

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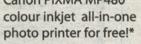
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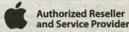
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SISO Tablo by Hantech

Touch-screen interface... Without a touch-screen!

Market Price: \$129 www.hantech.ca



Graphic designers, illustrators and other artists who use their PC for their work on a regular basis may feel that even the modern computer mouse is lacking when it comes to precision. In a business where attention to detail is key, no tool can be too accurate for use on the job, which is exactly why Hantech has brought us the SISO Tablo (\$129 www.hantech.ca).

This product will essentially transform any laptop computer into a functional tablet PC thanks to an easy-to-use installation package with a combination of hardware and software. The device makes it possible for any laptop user to use the Tablo pen as an input device through hand waves, pen flicks and through writing across the

screen of the laptop, allowing users to jot down notes, draw or edit art, or manually draw tables and figures with ease. The Tablo can even be used as an alternative to the mouse when playing simple video games, using the pen to point at targets instead of using the mouse to do so indirectly and using the pen's built in left- and right-click buttons.

Opening the box, users will find all that they need to start writing or drawing with the included tablet pen within 10 minutes.

First simply take out the hardware components and the CD and pop the disc into your laptop's optical drive. Once the autorun software starts, the software installation is just a few clicks and a couple of minutes away from finished. Then all that needs to be done is to set up the hardware.

There's not much involved in the set-up process either. The docking station — the device responsible for picking up the movements and input of the Tablo pen simply affixes itself to the top of your monitor with the help of a non-permanent adhesive fixture, usually above where a webcam might be on your laptop's bezel. Then the station's USB key should be plugged into your laptop, allowing the device to sync up with your computer.

From there the station will be able to detect the minute motions of the Tablo pen,

which is ready to go after three cell batteries are popped into it. For the sake of convenience 10 of these batteries are included with each Tablo.

Once the Tablo has been calibrated using the included software, the pen will be optimized for use with the connected laptop. While the definitions of the screen size can be defined manually, it's much easier to use the automatic calibration tool that is included. Through a series of targeted clicks and taps on the screen, the Tablo will figure out just how tall and how wide your laptop's screen is and adjust accordingly for maximum accuracy.

Also assisting the Tablo to be as precise as possible is the fact that not only does the Tablo pen use infrared to detect where exactly the pointer is on the screen, but the device uses ultrasonic signals as well. Once it is turned on, a slight humming noise (like the sound of an electric shaver) can be heard once the pen is brought up to the ear. That's the sound that the pen sends to the station, which has small speaker-looking devices on either side that are actually high-performance microphones. These two technologies working in tandem allow the Tablo to be even more accurate than one might expect.

Writing in programs such as Windows Live Messenger or in Microsoft Office or OneNote is a breeze, no longer making it impractical to use the drawing functions in those programs. With the Tablo pen, settings can be changed to suit your needs. Change the speed with which brush strokes thicken while using the pen for sketching or add gestures to customize the features of the pen's flick movements. With just a couple of adjustments the pen can be swiped quickly right or left to navigate forwards or backwards on a website and up or down in order to scroll through the contents of the site. Editing actions can also be added so that copying and pasting are simple pen strokes away.

A number of additional heads are also included for the Tablo pen, some of which are even ink-filled pen tips. One might wonder why anyone would want a tablet-style pen filled with ink when the pen is only going to be used on the screen of a laptop. Well that's because the station that detects the pen's movements can also be used to clip to a piece of paper, allowing the user to create real hard copies of notes while saving a digital version on the computer simultaneously.

Whether it's because the laser mice can cause the cursor to jump every now and then or simply because you want to try a different style of input, at \$129 this device is definitely worth a look. If you're curious about tablet PCs but aren't sure if they're really right for you, Hantech's SISO Tablo will provide you with the feel of a tablet PC with everything you need to get started on your very own laptop without the hefty

by Eric Waters



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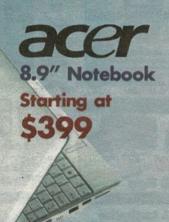
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The Doctor is in

Here's your chance to send your PC woes to our resident Techspert, the HUB PC Doctor

Hello Simon,

I've got a refurbished computer with Windows XP Professional. It is working OK, except that it does not open attachments I receive with some of my e-mail. A warning appears at the top that says: "Outlook Express removed access to the following unsafe attachments in your e-mail." The attachments that it referred to are absolutely safe. They are sent by people I know well and are important for me to see.

I'd much appreciate it if you could show me a way out. With my appreciation,

Z. L.

Hello,

The reason Outlook Express, and most mail programs, block certain file attachments is to protect the end user from downloading and unintentionally installing a virus, Trojan horse or piece of malware on their computer. If you want to disable this kind of protection it is important that you ensure you have up to date anti-virus and anti-malware applications installed, and that they are actively running while you are checking your mail.

In Outlook Express you can allow all attachments, including potentially unsafe ones, by doing the following:

- 1. Click on the "Tools" menu
- 2. Click on "Options"

5. Click "OK"

- 3. On the "Options" window that pops up choose the "Security" tab
- 4. Uncheck the "Do not allow attachments to be saved or opened that could potentially be a virus" checkbox

Some mail software, or web-based mail accounts do not offer the ability to disable this type of security. For those cases it is best to ask the sender to compress the file, or rename the file extension before sending it. PC Doc

Hi Sir,

I would just like to know about ideal CPU temperatures. My CPU remains between 40 and 47 degrees Celcius. What could be the best temperature for an AMD Athlon 64 Dual Core 5200?

Thanks, Ravi Hi Ravi.

The answer depends on which version of the AMD Athlon 64 X2 5200+ you have. It has a maximum operating temperature of 55-70 degrees Celcius if you have the 90 watt version, or 55-68 degrees Celcius if you have the 65 watt version. To be safe I'd just consider the maximum temperature to be 55°C as having a wide range like that isn't very useful. If you are concerned about temperatures you can purchase an after market cooler that should lower temperatures, but since your temperatures aren't too high I wouldn't recommend it. You may want to keep an eye on your temperatures during the warmer months, especially if you don't have air conditioning. The information about your CPU was found at the following websites: 90 watt version:

www.amdcompare.com/usen/desktop/details.aspx?opn=ADA5200IAA6CS 65 watt version:

http://products.amd.com/enus/DesktopCPUDetail.aspx?id=39 PC Doc



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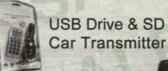




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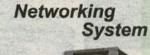


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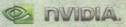








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The Doctor is in

Here's your chance to send your PC woes to our resident Techspert, the HUB PC Doctor

Dear HUB PC Doc.

I have an XP home PC. After I installed and uninstalled the "Internet Explorer 8-Beta" my computer does not do the Automatic Windows Updates anymore. I have even tried doing manual Windows Updates but I get an "Internet Explorer cannot display the webpage" message. I have also tried updating from Microsoft website, but I get the same message.

I also have couple of other problems at the same time: I cannot fix the "file system error, scan for and attempt recovery of bad sectors." I also cannot do disk defragmentation. When I try, I get a "Windows was unable to complete the disk check" message. I would much appreciate any help. Thanks. Yours truly, S. B.

Hi S. B.,

In order for Windows Update to work some Windows Services must be running on your PC. Microsoft has a knowledge base article regarding the problem you are experiencing with Windows Update: http://support.microsoft.com/kb/914226

Regarding your inability to run the Windows Disk Defragmenter and Error-Checking utilities on your computer, there is probably a piece of software running that is preventing your computer from completing these tasks. You can try to run them after you've booted into safe mode by following these steps:

- 1. Turn the computer on
- 2. Start pressing the F8 key. The Windows Advanced Options Menu will appear
- 3. Select the Safe mode option
- 4. Press Enter. The computer will begin to start in Safe mode. Safe mode will look a little different than what you are used to
- 5. Run the Windows Disk Defragmenter and Error-Checking utilities, once you are done close all programs and restart the computer normally As a free, and better, alternative to the Windows Disk Defragmenter I recommend using JkDefrag GUI available on the download page found here: www.emro.nl/freeware/

If you still encounter problems with the Error-Checking utilities you can try the instructions located at the

following link. This will allow you to run a disk check on your next reboot, before Windows fully starts. Please be aware that this may take several hours, and you shouldn't restart your computer in the middle of the process: http://www.deltatranslator.com/chkdsk.htm Be sure to back up all important data before running the Disk Defragmenter or Error Checking utilities as it is possible to lose data if there is a power outage or something wrong with your hard drive. PC Doc

Simon Bolduc is the HUB PC Doctor.

More help can be found online at www.hubcanada.com!

Each month one PC Doc submission will be chosen to receive a copy of McAfee Total Protection 2009.

This month's winner is Irene, congratulations!





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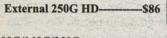
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Glory Days

Now I think I'm going down to the well tonight
And I'm going to drink till I get my fill
And I hope when I get old I don't sit around thinking about it
But I probably will
Yeah, just sitting back trying to recapture
A little of the glory of, well time slips away
And leaves you with nothing mister but
Boring stories of glory days

- Glory Days by Bruce Springsteen

My apologies if these turn out to be boring stories, I've told some of them before, but I was asked to reflect on my days as the editor (and publisher) of The Computer Paper.

Industry Impact

Even as we were just starting up The Computer Paper in Vancouver in the late 1980s, we knew we were having an impact on the industry. Articles by one of our writers, Roedy Green were particularly popular. His articles were always very in depth, but still very understandable and people were actually reading them. In particular, I remember one month he took issue with a particular brand of hard drive. Apparently the people had been raging over the high failure rates on this particular hard drive. He trash-talked the drives and sales dropped off substantially. Later, one of our major advertisers told us that they had been stuck with a warehouse full of these drives because of our article.



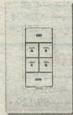
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Dealer and Retail Enquiries Welcome

Our advertisers consistently told us about the impact of the paper, customers would come in clutching the latest issue, asking for the latest and greatest technological gadget. They would specify custom systems, part for part, from articles in The Computer Paper.

Over the years, we made a concerted effort to encourage our advertisers to move beyond simple list style advertising, to include more graphic elements. In those days, we were creating most of the ads in the paper, because not all of our advertisers had desktop publishing capabilities. This often led to last-minute changes and the occasional error. I recall one ad getting printed that promoted "floppy dicks" for sale. As the publication grew across the country, our relevance took on new stature. Beginning in Vancouver in 1988, we launched an Alberta edition in mid-1989. In 1990, an office was opened in Winnipeg to launch a Prairie edition, with distribution in Saskatchewan and Manitoba. Our Toronto edition, when it rolled off the presses in 1993, started to get us real attention with the national advertisers, but they still wanted more, a truly national publication. An Eastern edition was started in 1994, with Ottawa, Montreal and Atlantic sections, finally giving us national scope. With five editions in place, we started to have regular advertising by the big players of the day like IBM, Microsoft and Corel. Through the mid-90s and into the new millennium, The Computer Paper became a truly national publication.

This monthly circulation didn't include our purchase of Toronto Computes! in February of 1994. The year of our entry into the Toronto market, we were able to purchase our major competitor from owner David Carter. Despite rumors that we might shut this publication down, our intention was the opposite. We wanted to have more frequency, and so pushed the two publications' distribution dates apart by two weeks and started publishing versions of the Computes! titles twice monthly in the major markets. (Vancouver, Toronto, Calgary, Edmonton, Ottawa and Montreal). These were the boom times.

Reader Impact

By the end of my term as editor, our circulation of just The Computer Paper had hit 357,000 monthly. With an estimated three readers per copy, we dreamed we might have a readership of over a million people per month in Canada. Our goal was to provide a Canadian perspective on the software and hardware revolution that was happening around us.

In those ten years, from the first mockup of The Computer Paper on a kitchen table in December 1987 to my last staff party in September 1997, it is my estimation that Canada underwent a revolution in its appetite for computer information. Starting from a period when perhaps 10 per cent of the population was interested in computers, by 1997, it seemed that everyone was paying attention. This change paralleled the development of the Internet, the improving ease of use of software and the increasing power and storage capabilities of the computers themselves.

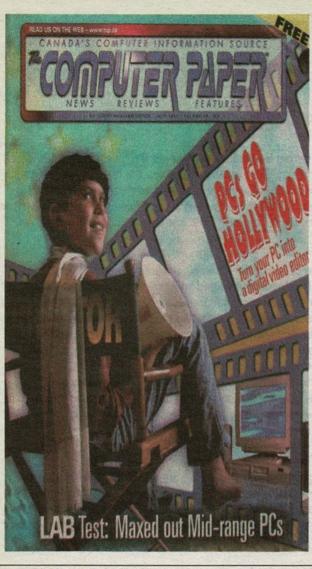
In the years since, I have met many people who have talked about what a significant role The Computer Paper played in educating them about computers. Regular articles on how to buy a computer or select the right software, benchmark testing of computers, monitors and printers helped people make good decisions with their purchases.

My Favorite Issues

Like all good publishers my favorite issue was always the next one. It would always have better and more interesting editorial with less mistakes and more ads. Issues that I remember are, perhaps strangely, not big technological events, but rather personal ones. There was the edition where we put the Teenage Mutant Ninja Turtles on the cover, because my son was in love with the movie. Our budget did not often allow for the cost of professional models and photo shoots, so we would often enlist staff or relatives to be on the cover. The issues with my kids as photo models — three out of my four kids made it onto the cover — stand out. Our youngest child's birth was announced in one of my editorials. "One more new product we left out of our What's New section. This new 8.6 pound chest-top model was announced recently by my wife. He is a zero-wait state screamer. (He cries if he doesn't get fed.)"

Great Memories

The best memories I have of my days at The Computer Paper, are largely to do with great times spent with the people who built the publication. There are too many people who helped to mention them all, but my thanks go out to people like editors David Tanaka, Graeme Bennett, Jeff Evans, and Mara Gulens, our associate publishers Hari Singh Khalsa, Suzanne and Patricia Fitzgerald, Einar Murchison, our



national sales manager John Oliver, salespeople Tino Wong, Marsha Miller, Frank Houston, Jamie Leighton, Dyal Khalsa and Kit Griffin, our resident techies Joshua Paul and Mike Cantelon, and very importantly our accountant Chris McPhie, who kept us on the straight and narrow. Of course none of the publications would have gotten out but for the long hours of the production people like Carolyn Howse, Jana Kolar, Helga Stitt and Ernie Stelzer.

The things I don't miss about life at The Computer Paper are the never-ending deadlines, the cross country travel and living my life in the public eye. The things I do miss are working with some amazingly smart and funny people and the constant stimulation of an industry inventing itself as it went along.

My era at the helm of The Computer Paper was an optimistic time. We believed we could do no wrong and everything was bigger and better each issue. The computer industry was still growing rapidly. Every week brought new and interesting things to look at and write about. The world wasn't deluged by the information available on the Internet, so we felt special and listened to. We were vaguely aware that we might be cutting down too many trees, but it hadn't occurred to us that all the rapid product turnover meant a vast swath of used consumer electronics full of toxic ingredients was heading towards the landfill, or to be dangerously "recycled" in villages in China. Global warming wasn't on many people's horizon and whatever recessions we hit seemed very minor.

The changes HUB: The Computer Paper is going through now, seem to be just one more step in the evolution of an important publication. The computer industry icon, PC Magazine, dropped their print edition in January of this year and have gone to the web and an electronic edition. I even picked up Masthead Magazine, the Canadian magazine industry chronicle, the other day and they were announcing that their publication is going all electronic. Such irony. The Internet has changed everyone's world and publications are making the changes they think are necessary to survive. I encourage you all to consider a subscription to keep tracking the changes and news in the Canadian computer industry. I know I am planning to get one.

Douglas Alder.

Founding Editor and Publisher of The Computer Paper

Douglas Alder is President of HomeBase Software Publishing Ltd. in Vancouver. HomeBase Software specializes in FileMaker database application development. He can be reached at www.hbase.net Tel 604 961-1069, or by email at doug@hbase.net



Keepsakes from the Golden Age of Computing

David Tanaka on his time at The Computer Paper

I have a couple of totes gathering dust in the back yard shed. They contain an almost-complete set of The Computer Paper, from Vol. 1 No. 1, right up to last issue in 2003 when the original TCP was put to pasture. Seemed like a good idea at the time to keep my own personal morgue.

I worked for TCP for a little more than 10 years, from the early 1990s to 2003, moving from news editor to editor to editorial director. What a great time to be tracking the personal computer industry. You had to be sleepwalking if you couldn't find an interesting story or three every day. The rise of Windows, Moore's Law constantly verified in startlingly short product improvement cycles, the rise of the World Wide Web, the dot-com bubble, Apple's constant Appleness...

I have another collection of stuff that runs parallel to my time at TCP, which I amassed quite by accident. They came mostly from Comdex and other tech trade shows. Chachka jars became a fixture at all the exhibitors' booths, filled with mints, gum, pens, and various flashing baubles. If you were a tech journalist you got the deluxe chachkas. I'd often give these things away, but a few I'd keep and over the years those few things turned into a box of stuff.

I went through that box as I wrote this article and I was surprised at the variety of company logos and product brands. I suppose you could group these into a few categories:

The mighty that time passed by

Under this category fall the Commodore Amiga solar calculator shaped like a 3.5-inch floppy disk (which still works); a musical keychain from Digital Equipment Corp.; a beach towel with the X-Tree Pro logo printed on it; pins for Compuserve, OS/2, MGI, AST and Aldus PageMaker 5.0; plush toys shaped like cute dragons from

Sceptre, a floppy disk wallet from Borland... Well, you get the idea. I have a few pens and such from Learning Company, Edmark and companies like that. The early '90s was the golden age of educational software development with very good retail titles continually hitting the market. Suffice it to say I feel a slight twinge of nostalgia when I see that kind of contents of the "three for \$9.99" software dump bins.

Dot-com and Y2K

A person with a great sense of humour sent me his antidote to the Y2K fear frenzy. It was a toque with MY2K? (my toque eh?) knitted into it. Only in Canada would that make sense. I also have large roach broach representing the Y2K "bug."

A lot of dot-coms didn't make it out of the gate, and I have bric-a-brac from various companies whose business plans I heard but can can no longer remember. Some survived for a while — if you live in Toronto you might recall empori.com, a hard goods access point that received stuff you bought online. I have a miniature empori.com shopping cart from the launch event. Others, like eBay just got bigger. The over-sized T-shirt I have from the launch event of eBay.ca presents interesting symbolism. I suppose my prize in this category is a pristine coil-bound notebook with the WorldCom logo on the cover.

Still in the game

Many of the baubles are logo'd with companies that are still around in one form or another. Microsoft, of course. I have pens, utility knives, clothing, book bags and even plush toys (the MSN butterfly) that mark various product introductions. I have a couple of Swiss army knives that HP cleverly used to roll out multi-function devices, along with knock-off knives from other companies with the same multi-purpose



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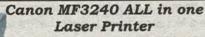
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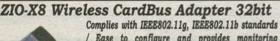
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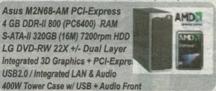
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Intel Power

AMD Power

Athlon™ LE-1640 Single-Core (2.7G)---\$309

Athlon™ X2 Dual-Core 5200+ (2.7G)--\$339

Phenom™ X3 Triple-Core 8650 (2.3G)---\$389

Phenom™ X4 Quad-Core 9650 (2.3G)---\$439

Intel Pentium4 Dual Core E5200 (2.5G)---\$359 Intel Core 2 Duo E7400 (2.80G) 1066fsb---\$429 Intel Core 2 Duo E8400 (3.00G) 1333fsb---\$489 Intel Core 2 Quad Q8200 (2.33G) 1333fsb---\$499

Asus P5N73-AM PCI-Express 4GB DDR-II 800 (PC6400) RAM S-ATA-II 320GB (16M) 7200rpm HDD LG DVD-RW 22X +/- Dual Layer Integrated 3D Graphics + PCI-Expres USB2.0 / Integrated LAN & Audio 400W Tower Case w/ USB + Audio Front

AMD Gamer

Athlon™ X2 Dual-Core 5200+ (2.7G)---\$459 Phenom™ X3 Triple-Core 8650 (2.3G)---\$509 Phenom™ X4 Quad-Core 9650 (2.3G)---\$559 Phenom™ X4 Quad-Core 9950 (2.6G)---\$599

ASUS M2N68-VM PCI-Express 4GB DDR-II 800 (PC6400) RAM S-ATA-II 500GB (32M) 7200rpm HDD LG DVD-RW 22X +/- Dual Layer Nvidia Geforce 9400GT 1024M PCI-E



USB2.0 / Integrated LAN & Audio CODEGEN M606 + 500W Power Supply + 2x Case Fan

Intel Gamer

Intel Core 2 Duo E8400 (3.00G) 1333fsb---\$609 Intel Core 2 Quad Q8200 (2.40G) 1333fsb-\$619 Intel Core 2 Quad Q9400 (2.66G) 1333fsb-\$689 Intel Core 2 Quad Q9550 (2.83G) 1333fsb-\$749 Asus P5QL (P43) PCI-Express

4GB DDR-II 800 (PC6400) RAM S-ATA-II 500GB (32M) 7200rpm HDD LG DVD-RW 22X +/- Dual Layer Nvidia Geforce 9400GT 1024M PCI-E USB2.0 / Integrated LAN & Audio
CODEGEN M606 + 500W Power Supply + 2x Case Fan





Intel Extremer

Antec Sonata-III + 500W Power Supply + 1x Case Fan

AMD Extremer

Athlon™ X2 Dual-Core 5200+ (2.7G)---\$679

Phenom™ X3 Triple-Core 8650 (2.3G)---\$729

Phenom™ X4 Quad-Core 9650 (2.3G)---\$779

Phenom™ X4 Quad-Core 9950 (2.6G)---\$819.

Intel Core 2 Duo E8400 (3.00G) 1333fsb---\$849 Intel Core 2 Quad Q8200 (2.40G) 1333fsb-\$859 Intel Core 2 Quad Q9400 (2.66G) 1333fsb-\$929 Intel Core 2 Quad Q9550 (2.83G) 1333fsb-\$989

Asus P5Q SE (P45) PCI-Express 4 GB DDR-II 1066 (PC8500) RAM S-ATA-II 1000GB (32M) 7200rpm HDD LG DVD-RW 22X +/- Dual Layer Nvidia Geforce 9600GT 512M DDR3



AMD

USB2.0 / Integrated LAN & Audio
Antec Sonata-III + 500W Power Supply + 1x Case Fan

message. To reinforce its message of speed, Lexmark used special edition Hot Wheels cars — I have a Shelby Mustang and a Pontiac GTO. Plus I have dozens of pens, business card cases, travel clocks, pins, etc. that aren't tied to a specific campaign or product launch, bearing just the corporate logo — a long list that includes Acer, Abit, Gigabyte, OKI, Toshiba, Epson and Intel.



Everyday utility

Some of the chachkas have taken on a life beyond the product launches they initially served. There are stainless steel mugs I use daily bearing Palm, nVidia, Fujifilm and other logos. A couple of ancient IBM AS/400 mugs with a "Life in the Fast Lanes" message that have taken on talisman status. They've accompanied us on our road trips across the country for more than a decade; we wouldn't leave home without

them. The various bags have continued life as book bags or environmentally friendly alternatives to plastic grocery bags. Active companies like Sony, Microsoft, Samsung and Epson get brief exposure every time we re-use one, although you can often see in the faces of the checkout people and other shoppers a momentary puzzlement at names like Merisel, SoftWorld or Expo Comm. It's ironic that the baubles in some cases have outlived the things they were pitching.

Back to those rough totes full of TCP back issues. I suppose I might want to go through them some day. But now's not the time to look back because there is still so much in the digital world that is unfolding.

I first became interested in personal computers because I saw in them as a great force for personal empowerment. To torture a McLuhanism, just as mechanical tools are extensions of our muscles, the computer is an extension of our brains. You can do so much more with a hammer and a saw than you can with your bare hands. What a mind can do with a computer we've only begun to explore.

David Tanaka

Editor / Editorial Director of The Computer Paper 1998-2003

Wholesale Prices at Retail

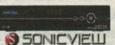












Computers & Laptops



Dell acer

Laptops from **LCD** Monitor

\$250 \$75

Pentium-4 & Monitor \$99 160GB Enclosure \$55





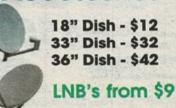




GPS with Blue tooth & FM Transmitter



Satellite Dishes, Antennas,



Cell Phones GPS & Accessories





VOIP Phone service Free Long Distance from your Cell Phone

9" Car Roof DVD Installed \$499.













Security Cameras & DVRs



100" Home Cinema \$1499

1225 Matheson Blvd. E. Mississauga Ph:905-238-9251 www.TRISONca.com



Intel Core 2 Bundles

Enlight Midtower Case
Nspire ISO-500 450W ATX PSU
Intel Pentium Dual Core ES300
Intel Core 2 Duo E8500
Intel Core 2 Quad Q8200
Intel Core 2 Quad Q9550



AMD Phenom Bundles



(5183) Seegate 160GB SATA/300 7200RPM w/ 8Mb...

Intel Core i7 Bundles

Asus P6T Deluxe v2 Motherboard 3GB DDR3 1333MHz Memory (OCZ3G133



Ultimate Gamer

Asus P5Q Deluxe or M3N-HT Dix/MemPipe Sony 3.5 inch Black FDD WD ITB SATA2/300 HDD, 32MB Cache BLACK 8GB DDR2 800 RAM (4x 2GB Modules) Antec Sonata III case w/500W PSU Asus ENGTX285 TOP/HTDI/ IGB, PCI-E 16 LG CH08LS10 Blu-Ray and DVD-RW Drive Liteon 18X Black DVD-ROM Drive (SATA) On-Board 8 Channel Digital Surround Sound Logitech G51 Speaker System US Robotics 56Kbps Modern Acer P244WBII 24" Digital Wide Screen LCD Logitech GI5 Gaming Keyboard with LCD Logitech G9 Laser Cordless Mouse Arctic Silver Thermal Compound Microsoft Windows Vista Ultimate 64bit OEM



	A Property of the last of the
AMD Athlon X2 5200+	see web
AMD Athlon X2 7750+	see web
AMD Phenom 9950	see web
AMD Phenom II X3 -710	see web
AMD Phenom II X4 -940	see web
Intel Pent. Dual-Core E5300	see web
Intel Core 2 Quad Q8200	see web
Intel Core 2 Duo E7400	see web
Intel Core 2 Duo E8500	see web
Intel Core 2 Quad Q8200	see web
Intel Core 2 Quad Q9550	see web

AMD MD CPUS

CPUs and Memory Available

	Memory Modules	
see web	(2501) 256 MB. SDRAM PC/133Mhz 16Chip	see web
see web	(1774) 512 MB. SDRAM PC/133Mhz	see web
see web	(2391) 512 MB, DDR PC3200 (400Mhz)	see web
see web	(3528) I GB, DDR PC3200 (400Mhz)	see web
see web	{4444} 1 GB. DOR2 PC5400 (667Mhz)	see web
see web	(8186) 2 GB. DDR2 PC5400 (667Mhz)	see web
see web	{5748} 1 GB, DDR2 PC6400 (800Mhz)	see web
see web	(8187) Z GB, DDR2 PC6400 (800Mhz)	see web
see web	[9389] 2 GB. DDR3 PC6500 (1066Mhz)	see web
see web	(9754) 2 GB. DOR3 PCI0666 (1333Mhz)	see web
see web	(6140) Corsair TWIN2X 2Gb PC6400 Dual Channel Kit	see web
see web	{9009} Corsair TWIN2X 4Gb PC6400 Dual Channel Kit	see web
see web	{7595} OCZ 4Gb PC6400 Gold Dual Channel Kit	see web
see web	{8319} OCZ 4Gb PC6400 Reaper Dual Channel Kit	see web
see web	(8943) OCZ 4Gb PC8500 Reaper Dual Channel Kit	see web
see web	(9630) OCZ 4Gb PC3-12800 Gold Dual Channel Kit	see web
	see web	See web (2501) 256 MB, SDRAM PC/133Mhz 16Chip

Home Theatre PC

Asus P5E-VM HDMI or Asus M3N78-EM HDMI Sony 3.5 inch Black FDD Seagate 1.5GB SATA2/300 HDD, 32MB Cache 4GB DDR2 800 RAM (2x 2GB Modules) Antec Fusion 430 HTPC Case w/430W PSU Infrared Remote and VFD Display Onboard Video With HDMI Output appague Win-TV 1250 HDTV/SDTV Tuner LG BHO8LS20 Blu-Ray-RW and DVD-RW Driw On-Board & Channel Digital Surround Sound Logitech Z-2300 2.1 Speaker System On-Board Gigabit Network Adapter Rockwell 56Kbps Modern Acer x263wbi 25.5" Wide Screen LCD Monito Microsoft Digital Media Pro Keyboard Logitech G5 Laser Mouse Microsoft Windows Vista Premium 64bit OEM 5 Year Labour and 1 Year Parts Warranty



AMD Athlon X2 5200+	see web
AMD Athlon X2 7750+	see web
AMD Phenom 9950	see web
AMD Phenom II X3 -710	see web
AMD Phenom II X4 -940	see web
Intel Pent. Dual-Core E5300	see web
Intel Core 2 Quad Q8200	see web
Intel Core 2 Duo E7400	see web
Intel Core 2 Duo E8500	see web
Intel Core 2 Quad Q8200	see web
Intel Core 2 Quad Q9550	see web

mother bounds	
Motherboards for AMD CPUs	
(10634) Asrock N6IP-S. Socket AM2, NF430 (mATX)	\$59.99
{10633} Asrock A780GXE/I28M, Socket AM2, AMD 780G (ATX)	\$109.99
(9556) Asus M3A78-CM. Socket AMZ, AMD 780V (mATX)	\$94.99
(10854) Asus M4A78 PRO, Socket AM3, AMD 780 (ATX)	\$139.99
(9390) Asus M3N-HT Deluxe/Mempipe, Socket AM2 (ATX)	\$219.99
(9568) Asus M3N78-VM, Socket AM2, n8200 (mATX)	\$94.99
(9853) Asus M3N78-EMH HDML Socket AM2. n8200i (mATX)	\$129.99
{10269} ECS GeForce6100PM-M2 VZ w/ AMD LE-fl50 CPU (mATX)	-0584.99
Motherboards for Intel CPUs	
(\$102) Associa (Complical-SATA2 CATTS (ATV) DOLES, ACD	484 00

website for accurate and up to date prices.

(10269) ECS GeForce6100PM-M2 VZ w/ AMD LE-1150 CPU (mATX).	
Motherboards for Intel CPUs	
(8102) Asrock 4CoreDual-SATA2, LGA775 (ATX) PCI-E & AGP.	\$84.9
{10804} Asrock G3IM-S. LGA775. Intel G3I (mATX)	0559.9
{10146} Astock P43TWINS2I600. LGA775. Intel P43 (ATX)	\$99.9
(8601) Asus PSE-VM HDMI, LGA775, Intel G35 (mATX)	\$149.9
(9020) Asus PSE3 Premium, LGA775, Intel X48 (ATX) w/Wiff	\$344.9
(8640) Asus P5GC-MX/1333, LGA775, Intel 954GC (mATX)	\$64.9
(9308) Asus PSKPL-CM. LGA775, Intel G3I (mATX)	\$74.9
(9479) Asus P5Q, LGA775, Intel P45 (ATX)	\$154.9
(9656) Asus P5QC. LGA775. Intel P45 (ATX)	\$179.9
(9478) Asus PSQ-E, EGA775, Intel P45 (ATX)	\$189.9
(9481) Asus PSQ Deluxe, LGA775, Intel P45 (ATX)	\$249.9
(9480) Asus P5Q3 Deluxe, LGA775, Intel P45 (ATX) w/ Wiff	\$274.9
(9036) Asus PSSD2-VM. LGA775, SIS 672 (mATX)	\$59.9
(9021) Asus Rampage Formula. LGA775, Intel x48 (ATX)	\$364.9
(8770) ECS 945GCTM/I333 v3. Socket 775, Intel 945GC (mATX)	\$59.9
{10656} Asus P6T, LGAI366, Intel X58 (ATX)	\$299.9
(10814) Asus P6T Deluxe v2, LGAI366, Intel X58 (ATX)	\$364.94
(10579) Gigabyte GA-EX58-DS4. LGAI366. Intel X58 (ATX)	\$289.9
(10922) Glosbyte GA-EX58-UD4P, LGAI366, Intel X58 (ATX)	\$319.9
{10921} MSI X58-Pro. LGAI366, Intel X58 (ATX)	\$229.9
(10637) MSI X58-Pletium, LGAI366, Intel X58 (ATX).	\$264.9
Full List of Motherboards Available Online	

(6151) Seagate 320GB SATA/300 7200RPM w/ 16Mb	\$64
[8116] Seagate 500GB SATA/300 7200RPM w/ 32Mb	\$74
(8442) Seagate 500GB CE SATA/300 7200RPM w/ 32Mb	\$134
(8117) Seagate 750GB SATA/300 7200RPM w/ 32Mb	05119
[8217] Seegate ITB SATA/300 7200RPM w/ 32Mb	\$129
{9824} Seagate LSTB SATA/300 7200RPM w/ 32Mb	\$169.
{9423} WD 80GB SATA/300 7200RPM w/ 8Mb.	\$49.
{4775} WD 160GB SATA/300 7200RPM w/ 8Mb	\$54
(5410) WD 320GB SATA/300 7200RPM w/ 16Mb	\$59.
{5651} WD 500GB SATA/300 7200RPM w/ 16Mb	\$74.
{9998} WD 640GB SATA/300 7200RPM w/ 32Mb	\$99.
(9564) WD 750GB SATA/300 7200RPM w/ 32Mb	o\$114
{10025} WD ITB SATA/300 5400RPM W/ 32Mb	O\$129.
(9563) WD ITB SATA/300 7200RPM w/ 32Mb.	\$139.
(10840) WD 2TB SATA/300 5400RPM w/ 32Mb	0\$384
{9862} WD 74GB SATA/300 10000RPM w/ 16Mb	o\$189.
{9775} WD ISOGB SATA/300 IOOOORPM w/ I6Mb.	\$224
(9416) WD 300GB SATA/300 10000RPM w/ 16Mb	\$324
Notebook Hard Disk Drives (2.5")	
(9848) Fujitsu 320G8 SATA 5400RPM w/ 8Mb	\$69.
{9826} Seagate 320GB SATA 7200RPM w/ 16Mb.	\$99.
(10802) Seagate 500GB SATA 7200RPM w/16Mb	\$169.
(8635) Samsung 320GB SATA 5400RPM w/ 8Mb	\$74.
(10089) Samsung 500GB SATA 5400RPM w/ 8Mb	\$119.
(8412) WDC 80GB PATA 5400RPM w/ 8Mb	\$69.
(8414) WDC 160GB PATA 5400RPM w/ 8Mb.	\$89.
(8415) WDC 250GB PATA 5400RPM w/ 8Mb.	\$109.
(8625) WDC 320G8 SATA 5400RPM w/ 8Mb	\$79.
Full List of Hard Drive Brands Available Online	

(7302) D-Link DGS-1005D - 5 Port Gigabit Switch.	\$44.99
(6746) Linksys EGOO5W - 5 Port Gigabit Switch	\$69.99
(8047) D-Link DSL-2320B xDSL Ethernet/USB Modern	\$69.99
(9299) Asus WL-520GU Wireless 802.llq Router.	\$59.99
(8079) D-Link DIR-625 Wireless 802.fin Router	\$79.99
(1489) Linksys BEFSR4I Cable/xDSL Router - 4 Port	\$64.99
(6914) Linksys WRTS4G2 Wireless 802.flq Router	\$59.99
(5464) Linksys WRT54GL Wireless 802.flg Router (Linux)	\$84.99
(8734) Linksys WRTI6ON Wireless 802.11n Router	\$89.99
(10615) TP-Link TL-WR340GD Wireless 802,flg Router	\$29.99
(10031) TP-Link TL-WR94IND Wireless 802.1in Router	\$54.99
(8573) TP-Link TD-8841 Router w/ 4 Port & DSL Modern	\$34.99
(8574) TP-Link TD-W8920G Wireless Router & DSL Modern	\$54.99
(10116) Zio Enzo WG-100R Wireless 802.flg Routes.	\$29.99

Cases and Power Supplies

Home Office

Asus M4A78 Pro or Asus P5Q Motherboard Sony 3.5 Inch Black FDD WD 500GB SATAZ/300 HDD. 16MB Cache 2GB DDR2 800 RAM (2x IGB Modules) Chenbro PC61169 Black Midtower ATX Case Nspire ISO-500 450W ATX PSU Asus EN9400GT/DI/IGD2 Low Profile LG GH22LS40 Black DVD-RW Drive On-Board 6 Channel Digital Surround Sound Logitech LS-21 Speaker System Rockwell 56Kbps Modern On-Board Gigabit Network Adapter Acer X223wb 22" LCD Monitor Keytronic KT800 104 Key Keyboard Logitech Optical Mouse w/scrollwheel and pu oft Windows Vista Business 64bit 5 Year Labour and 1 Year Parts Warranty



	1
AMD Athlon X2 5200+	see web
AMD Athlon X2 7750+	see web
AMD Phenom 9950	see web
AMD Phenom II X3 -710	see web
AMD Phenom II X4 -940	see web
Intel Pent. Dual-Core E5300	see web
Intel Core 2 Quad Q8200	see web
Intel Core 2 Duo E7400	see web
Intel Core 2 Duo E8500	see web
Intel Core 2 Quad Q8200	see web
Intel Core 2 Quad Q9550	see web

Removable Storage

	{10699} Mitsumi 1.44Mb Beige Floppy Disk Drive	\$9.99
	(8566) Sony 1,44Mb Black Floppy Disk Drive	19.99
	(3346) Sony L44Mb Floppy Disk Drive (USB)	\$34.99
	{10101} Ultra 1.44Mb Floppy Disk Drive & Card Reader (Black)	\$34.99
164.99	Enclosures and Controller Cards	
194.99	{8128} Linksys NAS2000 Network Storage System (SATA x2)	\$159.99
54.99		\$29.99
1	{10725} Ventec NST-300SU-BK - 3.5" ESATA/USB Enclosure (Blk)	\$34.99

(8534) Antec NSKI380 Cube Case w/ 350W (mATX)	\$139.99
(7950) Antec NSK4480 Mini-Tower w/ 380W (mATX)	\$109.99
{7952} Antec NSK4480B Mini-Tower w/ 380W (mATX) Black	\$109.99
(4479) Antec SLK1650 Mid-Tower w/ 350W (ATX) Beige	\$79.99
(3599) Antec Super Lanboy Aluminum (ATX)	\$89.99
(7665) Antec Sonata III 500 Plano Black w/ 500W (ATX)	\$154.99
(1521) Antec PIB2 Black Tower Case (ATX)	\$179.99
(9448) Antec Three Hundred Mid-Tower (ATX) Black	\$74.99
(6915) Antec Nine Hundred Mid-Tower (ATX) Black	\$129.99
(9393) Antec Twelve Hundred Mid-Tower (ATX) Black	\$214.99
(9898) Asus TA-B3I Mid-Tower (ATX) Black/Red	\$39.99
(10914) Asus TABH3 Mid-Tower (ATX) Black	\$39.99
(1648) Chenbro PC6II69 Mid Tower Case (ATX) Black	\$69.99
(6545) Chenbro PC61319 Mid Tower Case (ATX) Black	\$44.99
(10912) CoolerMaster RC 534+ Mid Tower Case (ATX) Black	\$69.99
(9422) CoolerMaster CM 690 Mid Tower Case (ATX) Black	\$89.99
(9421) CoolerMaster RC 590 Mid Tower Case (ATX) Black	\$89.99
[10807] CoolerMaster RC 600 Mid Tower Case (ATX) Black	\$94.99
(10096) Enermax Chakra Mid Tower Case (ATX) Black	\$69,99
(10913) Enermax Phoenix Neo Mid Tower Case (ATX) Black	\$84.99
(1540) Enlight Mid Tower Case w/ 7 Bays (ATX) Beige	\$64.99
(3936) Enlight Mid Tower Case w/ 7 Bays (ATX) Black	\$64.99
(7901) Thermaltake Wing RS 100 · VG1000BNS (ATX) Black	\$64.99
(10691) Thermaltake V9 · VJ400GIN2Z (ATX) Black	o\$124.99
[6263] Thermaltake Mozart VC4000SNS Desktop (ATX) Silve	L\$144.99
(3906) Thermaltake Tsunami Dream VA3000BWA (ATX) Blac	k.\$154.99
(4109) Thermaltake Tsunami Dream VA3000SWA (ATX) Silve	L\$154.99
(4430) Thermaltake Armor VA8000BWS (ATX) Black	\$199.99
(8727) Thermaltake Armor* VH6000BWS (ATX) Black	\$224.99
(6170) LianLi PC-60A Plus II Aluminum Case (ATX) Silver	\$164.99
(6171) LienLi PC-60B Plus II Alumirum Cese (ATX) Black	\$164.99

Surf System

ECS 945GCT or Asrock N61P-S M Sony 3.5 Inch Black FDD WD 320GB SATA2/300 HDD, 8MB Cache 2GB DDR2 667 RAM (2x IGB Modules) Napire ISO-500 450W ATX PSII On-Board PCI-Express 3D Accelerator Rockwell 56Kbps Modern Liteon 18X Black DVD-ROM Drive (SATA) On-Board 6 Channel Digital Surround Sound Logitech S-I2O Speaker System On-Board 10/100 Network Adapter Acer X193wb 19" LCD Monitor Alaska Optical Mouse w/scrollwheel and pad Microsoft Windows Vista Home Basic 64bit 5 Year Labour and 1 Year Parts Warranty



AMD Athlon X2 5200+	see web
AMD Athlon X2 6000+	see web
AMD Athlon X2 7750+	see web
AMD Phenom 8450	see web
AMD Phenom 9950	see web
Intel Pent. Dual-Core E5300	see web
Intel Core 2 Quad Q82Q0	see web
Intel Core 2 Duo E7400	see web
Intel Core 2 Duo E8500	see web
Intel Core 2 Quad Q8200	see web
Intel Core 2 Quad Q9550	see web

Video Cards

ANY HOPOCORUS	
{10015} Asus AH3450/HTP w/ 256Mb (AGP)	\$64.99
{9637} Asus AH3650 Silent/HTDI w/ 512Mb (AGP)	\$94.99
(10144) EVGA GeForce 6200 w/ 256Mb (AGP)	\$54.99
PCI Express Videocards	
(10014) Asus Extreme AH4670/DI w/ 512Mb (PCI-E)	\$109.99
{10118} Asus Extreme AH4850/HTDI w/ IGb (PCI-E)	\$239.99
{10575} Asus Extreme AH4870 DK/HTDI w/ IGb (PCI-E)	\$329.99
(8983) Asus Extreme EN620OLE TCIG/TD5I2M w/ SI2Mb (PCI-E)	\$44.99
{11099} Asus Extreme EN8500GT Magic/HTP w/ 5I2Mb (PCI-E)	o\$79.99
{10604} Asus Extreme EN9400GT/DI w/ IGb (PCI-E)	\$94.99
(9821) Asus Extreme EN9500GT TOP/DI w/ 512Mb (PCI-E)	
(9418) Asus Extreme EN9600GT Silent/HTDI w/ 5I2Mb (PCI-E)	O\$154.99
[11056] Asus Extreme EN9800GT/HTDP/IGD3/A w/ IGb (PCI-E)_	
(10159) Asus Extreme EN980OGTX+ DK/HTDI w/ 512Mb (PCI-E)_	
(10850) Asus Extreme ENGTX285 TOP/HTDI w/ IGb DDR3 (PCI-E).	
(10712) Asus Extreme ENGTX295/2DI w/ 1.792Gb DDR3 (PCI-E)	
(10866) BFG GeForce GTX260 OCX Maxcore 55 w/ 896Mb (PCI-E)	\$344.99
(10799) BFG GeForce GTX285 OCX w/ IGb DDR3 (PCI-E)	
(10713) BFG GeForce GTX295 OC w/1792Gb DDR3 (PCI-E)	
(10221) Sapphire HD4350 w/ SIZMb DDRZ (PCI-E)	
(10129) Sapphire HD4550 w/ 5I2Mb DDR3 (PCI-E)	
(10004) Sapphire HD4670 w/ 512Mb DDR3 (PCI-E)	\$99.99
(10207) Sapphire HD4830 w/ 5I2Mb DDR3 (PCI-E)	\$129.00
(9574) Sapphire HD4850 w/ 512Mb DDR3 (PCI-E)	
(9599) Sapphire HD4870 w/ 5I2Mb DDR5 (PCI-E)	
(9819) Sapphire HD4870 X2 w/ 2Gb DDR5 (PCI-E)	\$549.99
Full List of Video Cards Available Online	N. Carlo
(9259) Hauppage WinTV HVR-I250 TV Tuner.	\$69.99

(1689) Hauppage WinTV HVR-1600 TV Tuner (Retail Box)... (6967) Hauppage WinTV HVR-1800 TV Tuner... (5997) Hauppage WinTV HVR-2250 TV Tuner...

Hard Drives and Storage

(1801) Seepate 80GB ATA/100 7200RPM w/ 2Mb.
(1801) Seepate 160GB ATA/100 7200RPM w/ 6Mb.
(1819) Seepate 160GB ATA/100 7200RPM w/ 6Mb.
(1819) Seepate 160GB ATA/100 7200RPM w/ 6Mb.
(1819) Seepate 500GB ATA/100 7200RPM w/ 6Mb.
(1819) Seepate 500GB ATA/100 7200RPM w/ 6Mb.
(1819) WD 160GB ATA/100 7200RPM w/ 6Mb.
(1819) WD 160GB ATA/100 7200RPM w/ 6Mb.

(1932) WO GOOGS RIAN DO FEDORMS W. JOME.
Serial RAT Read Disk Drives
(19815) HRacN ITB SATA/300 7200RPM w/ MMb.
(1992) Samsung 500G SATA/300 7200RPM w/ MMb.
(1994) Samsung TIB SATA/300 7200RPM w/ SMb.
(1994) Samsung TIB SATA/300 7200RPM w/ SMb.

{1315} {2437} Sony 16X DVD-ROM Drive (Beige/Black)	\$24.9
(10679) LiteOn ISX DVD-ROM Drive (Black) Serial-ATA	\$24.9
Full List of Drives Available Online	
(9786) LG GH22NS30 (22x DVD R/RW) (Black) (SATA)	\$29.9
(9444) LG GHZ2NP2O (ZZX DVD R/RW) (Black) (PATA)	\$29.9
(10801) LG GH22LS40 (22x Lightscribe DVD R/RW) (Black) (SATA).	\$39.9
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A Look Back at a Leap Forward

Graeme Bennett looks back on an industry

An Epiphany

I had an epiphany back in 1979. At the time, I was spending my evenings writing songs and playing keyboards in a band, and paying the bills with a day job as a sign maker. On this particular day, I had been cutting stencils for a large illuminated sign for the then-new Insurance Company of British Columbia (ICBC) and had been having



difficulty with the curves on the letter "C." The night before, I'd been up late, writing out sheet music for a new song. I was tired.

I took a few hours off from work to attend a "New Technologies Trade Show" in downtown Vancouver. And there, right near the entrance, was a robotic sign-cutter, finishing a letter "C" with speed and accuracy I would never be able to beat by hand. I marveled at that robot's mastery of my trade and then turned to the next aisle of the show-floor, where a man was playing music on a keyboard hooked up to an Apple II computer and then — what!? — it printed out the sheet music of what he had just played. I barely remember the rest of the aisles, so shaken was I by these events.

That was it. I'd seen my future, all at once, and it was suddenly clear that I had better learn as much as I could about computers. I began to study everything I could get my hands on about the topic. I collected vast quantities of computer magazines and books, brochures, hardware and software manuals and programming reference guides. I took a course sponsored by the local computer club. The teacher assured me that, even if I didn't understand the value of learning hexadecimal notation right now, I soon would. He was right.

A friend of mine who was taking a programming course at college graciously spent his evenings teaching me everything I thought to ask him about. One day in 1980, he brought over a Sinclair ZX80, a tiny home computer with a membrane keyboard and 1 Kb of RAM. We very quickly taught it to play rudimentary games. This wasn't easy as the ZX80 blanked the TV screen any time the processor was busy.

Another friend of mine bought a Radio Shack TRS-80 Color Computer. Certainly, colour seemed to be a feature worth having, but I couldn't get the past the feeling that the TRS-80 was a bit, well, clunky.



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I was more smitten by the colour capabilities and the full-travel keyboard (with lowercase letters, even!) of the Commodore 64. It utilized a 65xx CPU that seemed to be in all the computers that interested me most. It had decent sound. It even had a fully programmable 65xx-series CPU right there in the disk drive controller!

In those days, even a CRT monitor cost several hundred dollars, and a 20-megabyte hard drive cost thousands. One had to choose carefully. I had considered the lowcost Vic 20, but it seemed too toy-like, too limited. At the other end of the spectrum, the \$10,000 Apple Lisa computer was the hot new technology of the day. Magic Desk, dubbed "Commodore's answer to Apple's Lisa," launched at CES in 1983. Microsoft released Bob, aiming at roughly the same goal for PCs, in 1995.

As the 1980s wore on, I worked with many different models of increasingly graphics- and music-centric computers including Commodore 64, Macintosh, Atari ST, Amiga, and various IBM-compatible machines — which suffered from laughably archaic graphics and sound (and memory architecture) during this period. Still, the IBM-PC and Macintosh increasingly dominated both business and home markets as the '80s drew on.

I'd pretty much given up on Commodore and Atari by 1988/89, having watched these companies blunder their way into market insignificance during these years. PCs, since the advent of VGA in 1987, no longer looked so artistically challenged, and the millions-of-colours luxury of the Mac II (or the "wicked fast" 40 MHz Mac IIfx to which I eventually upgraded in 1990) was truly a giant step forward in my technological journey — and the fact that my earning potential almost instantly doubled eased the sticker shock considerably.

As the 1990s dawned, with the help of the PostScript imagesetters at my local service bureau and powerful tools such as Adobe Photoshop, Illustrator, and FreeHand, I was finally able to compete with that damned robot at that fateful

With the help of increasingly powerful MIDI workstations and professional quality music publishing tools such as Coda Software's Finale or Sonus SuperScore (which I helped create), I was able to create great looking sheet-music scores, as well.

And so it was that I was hired as the computer music expert at a musical instrument retailer, and tasked with creating and placing the company's ads in appropriate publications. In addition to ads placed elsewhere, I soon discovered that ads placed in The Computer Paper generated good results. The Computer Paper had been growing in reputation, readership, and size since its inception in February

One fateful day, when TCP's account rep dropped by to pick up my latest ad copy, he looked at my ad layout and asked me if I'd ever considered doing this full time. We got to talking and he invited me to drop by the paper's office for a chat with the boss. In short, they made me an offer I couldn't refuse, I demonstrated an interest and aptitude at writing about computer technologies, and ended up working at The Computer Paper for nearly a decade. It was truly the most exciting and interesting work experience of my life — a five-year stint at Microsoft since then notwithstanding.

Graeme Bennett, Managing Editor, Senior Editor and Editorial Director, 1990 - 1999

Graeme Bennett currently shares a home in Redmond, Washington with his family, several musical instruments, and far more computers than he really needs, running various flavours of Windows, Mac OS X, and Linux. A Playstation 3 is more powerful

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The Word from the TCP Test Lab

Sean Carruthers on his time with The Computer Paper

My journey with HUB: The Computer Paper actually started up a side road.

I first came to Toronto in 1998 to take a job writing the monthly Test Lab feature for Canada Computer Paper's reseller magazine, Canadian Computer Wholesaler. I had been writing a regular column on web site optimization for CCW from my small-town home in Manitoba, and when the Test Lab position became available, I applied for it

thinking there was no way I'd end up with the job. Boy, was I in for a shock!

I had been earning my living up until that point slinging compact discs to disaffected youth and hip adults, while writing about music and computer technology on the side. So, writing about technology full time was like a dream come true to me. You mean they're going to let me play with a bunch of computers and cameras and they're going to PAY me, too? Awesome!

Of course, there was a lot of work involved, too. I soon came to realize that doing a "lab" on a particular category of technology meant running a lot of tests, sometimes repeatedly, to make sure that the tests were as apples-to-apples as they could possibly be. Computers would be put through a process called "benchmarking," which meant running a whole series of automated tasks using special applications designed to quantify differences in performance and capabilities. And sometimes the software was a bit cranky, causing entire tests to have to be re-run after waiting overnight for the results.

It was fun, but it was certainly a lot more involved than I first thought. Imagine my surprise when three months later I was asked to step up into the big chair as the Test Lab Editor of The Computer Paper. For a few months, that would be in addition to continuing the lab testing for CCW, which seemed like it might actually finish me off. On the other hand, it would give me the opportunity to work regularly with David Tanaka, the nicest editor you could ever hope to have. With a certain level of apprehension (about the workload, of course), I jumped in with both feet, and never looked back.

From there on in, it was a regular cycle of testing the products that everyone wanted in-depth information about. Every few months it was another desktop computer roundup, and every so often I'd do a roundup on notebooks, which were very much a luxury item. We got to test laser printers, inkjet printers, multifunction printers, and solid ink printers. We did CD readers, CD burners, DVD readers and DVD burners. We did hard drives, Zip drives, and magneto-optical drives. I even got to look at digital cameras when they first broke the one-megapixel barrier!

Of course, having shiny new technology around the Lab also attracted some problems. One regular occurrence during my years of doing the Test Lab feature: my colleague Nestor Gula (editor of Toronto Computes!) kept wandering into the Lab, offering to do a "drop test" on anything expensive we had on hand. I never took him up on it, but in hindsight, I'm wondering if I should have. It would have added a bit more drama to the Lab reports!

I saw my fair share of changes at The Computer Paper. Technology has a bad habit of changing rapidly, and during my time in the Lab we started to shift some or our focus towards the growing consumer electronics category. We weren't the only ones to make this shift: by 2003 the long-running computer trade show Comdex decided to pack it in when most of the companies that used to participate in the show jumped ship for the burgeoning Consumer Electronics Show (CES), instead.

That change was also a good part of the reason The Computer Paper became HUB: Digital Living in 2003. At that point, people wanted more multimedia and less laser printers. And with the web-ification of the world, most readers wanted articles that were less sprawling. While you'd think having to write fewer words would be easier, it wasn't: it became a huge battle trying to figure out what could be safely left out... and believe me, I always pushed the limits, trying to leave in as much as I possibly could. (Sorry, Megan!)

My relationship with the magazine changed abruptly in 2004 when our parent company restructured our division completely out of existence. Thankfully, HUB: Digital Living was rescued by Piccolo Publishing, eventually went through a full-circle metamorphosis and emerged as HUB: The Computer Paper.

Me? I became a full-time freelancer at that point, which came with a new set of challenges, including: How much coffee can I drink in one day before I start to hallucinate? Can I really call it "work" if I'm in my pyjamas until 5 p.m.? How many courier packages full of review products can I receive before my neighbors start to wonder if I'm up to something shady?

Thankfully, I found my place in the world of technology television thanks to the folks at G4TechTV Canada, who were just in the process of creating a bunch of new Canadian technology content. That led to a full-time gig creating video content with butterscotch.com, which is now staffed with some of my favourite people from both G4TechTV and the old Canada Computer Paper team. And to think this all started way back when.

Speaking of which, I do want to take this opportunity to thank Grace Casselman, the editor of Canadian Computer Wholesaler, who took a chance on me back in 1998 on the basis of the handful of columns I had turned in to her as a freelancer. Unfortunately, Grace passed away in 2006, and I don't think I ever got the chance to thank her properly for taking that chance on me, so thank you, Grace. Your consideration, kindness and patience played a big part in shaping who I am today, and you are missed.

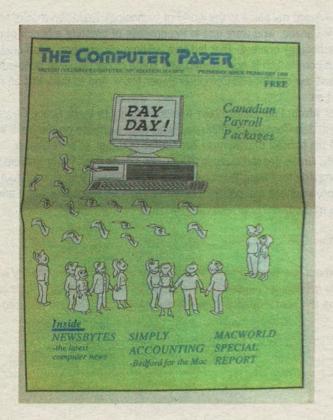
Sean Carruthers, Test Lab Editor 1998 - 2003

Sean Carruthers is a Senior Producer at butterscotch.com, a technology website dedicated to helping people better understand and use technology. He is also an alumni of the G4TechTV Canada shows Call For Help and The Lab with Leo Laporte.



The Computer Paper Retrospective

A TCP timeline by Dorian Nicholson



As a relative newcomer to the world of tech journalism, it was a bit imposing to get my big editorial start with HUB: The Computer Paper in the latter half of 2008. I started earlier in the year as a web editor, learning the ropes with the help of Andrew Moore-Crispin, who preceded me as editor of the magazine. Things were fast-paced, as they are at most publications, and I learned more than I ever expected about computers, consumer electronics and the business of running a national magazine in just my first few months at The Computer Paper.

The times change quickly, and I witnessed more than a couple of great events unfold in the world of technology in what seems like one of the shortest years of my life. I started at The Computer Paper in April of 2008, and this issue marks my one year anniversary of sorts for writing and working for HUB. In this short time, I witnessed the release of countless computers, cameras and video games, and got to meet and speak with people that were involved in the development, testing and release of those products. For me it was a dream come true. In my teenage years I had always wanted to know what it was like to test computer products and video games and to report on all of the latest and coolest gadgetry. It seemed like an impossible aspiration at the time, a gig that was too cool to actually get. So many people in my circle of friends and colleagues wanted in on that and wanted to be doing exactly what The Computer Paper was doing, to be telling people about what the next earth-shattering development was going to be and why it was important. I feel fortunate to have gotten on board and experienced what it was like to be in the industry, soak up some of the experiences and meet many of the contacts that I maintain to this day. But what I didn't fully appreciate until researching this piece was that the feeling I got from working at The Computer Paper — being at the epicentre of all of these tech developments — was the very same feeling that all of my



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predecessors felt when they sat in the editor's chair. However, their stories stretch back to before I even considered writing for a tech magazine and, in some cases, to before I was even aware of what a "personal computer" really was. They helped me and countless other Canadians to figure out why computers and technology were relevant to our work and personal lives through their work at The Computer Paper, and it sounds like they had a lot of fun doing it. Here's a bit of what I learned from talking to them about their experiences.

"In the early days of The Computer Paper, it seemed like about 10 per cent of the population even knew what a computer was," Doug Alder, the original founder of The Computer Paper recalls.

"It was a very small community, you would see the same faces at the user groups, in the stores, using the bulletin boards to talk to each other. These were the hardcore geeks. Remember, in these days you still had to walk to the Internet," Alder says jokingly. "It was called a library. Every bit of information about computers was snapped up quickly by this hardcore group."

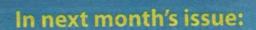
Alder formed The Computer Paper not long after joining a spiritual group and converting to Sikhism. In the early 1980s he moved from Toronto out to British Columbia, where he was raised, and soon committed to a plan to form his own computer publication. He was already fascinated with the capabilities of the first line of Macintosh computers and had bought his own Mac Plus while in school studying for his MBA. A friend who showed him the free technology papers that were being distributed in California at the time such as Micro Times and Computer Currents really opened his eyes to the potential that a "Computer Paper" would have in Canada. In 1988, the magazine was born.

"It moved from humble beginnings with basically my wife Kathryn and I creating that first issue on our kitchen table, to a staff of over 70 people when I left the company in 1997. It was an amazing time," Alder says. "The people that I met, our customers and the staff that assembled made most days a joy to show up at work."

It's hard to imagine a more ideal job for someone so enthusiastic about the potential of technology than the one Alder created for himself when he created The Computer Paper.







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"I was such a lucky guy to stumble upon the idea of creating a national chain of local computer publications. It all happened at the right time. The industry was in double digit growth, there was a vacuum for information on the products and we were lucky enough to be there to fill the void. We were like kids in a candy store. This was probably the best job I ever had."

That enthusiasm is similarly echoed by David Tanaka, who took over the editorship of The Computer Paper when Alder left the company in '97.

"Before I started at TCP I worked for a trade paper in Toronto called Computer Dealer News. That was my first job after journalism school, so when I started at TCP I was guite shocked by what I perceived to be the crudeness of it." Tanaka says of the fact that the magazine was free and on low-cost newsprint. "But I soon discovered that it was honest and had integrity. And I think that's what the readers

Tanaka also got his editorial debut at The Computer Paper and saw the magazine through its peak years of national distribution with regional magazines that carried the Computes! suffix.

"We had Vancouver Computes!, Calgary, Toronto, Ottawa... However, by this time the new owners were pressing for something beyond the computer fanzines that TCP and the Computes! franchises represented," Tanaka says of the need to broaden readership even then. "Expand the audience beyond the 18- to 45-year-old male geek, that was the directive."

Introducing HUB: Digital Living, intended as the evolution of The Computer Paper, was Tanaka's last act with the company. "[That magazine] became the vehicle to move us beyond pure computing and into the digital world that was unfolding before

David Tanaka semi-retired, and at about the same time Piccolo Publishing acquired the rights to publish HUB: Digital Living. Scott Piccolo, owner and president of Piccolo Publishing reflects on those wild, transitional years.

"I started off working for Canada Computer Paper in 1998 for Ottawa Computes! and after that I was transferred to Toronto." Piccolo says. "After a few years I helped start Total Gamer and in 2003 I bought the magazine and went on my own. In 2004 I

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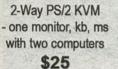
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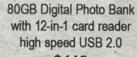
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made an agreement with
Trader, which was the owner of
The Computer Paper at the
time, to arrange a buyout."
Piccolo says that those years
were hectic and crazy, but
enjoyable on the whole.

"It's allowed me to be a part of a bit of Canadian history," he says. "At this point it's the longest running and the only free computer paper around and I'd like to see it kept alive for 20 more years."

Shortly after Tanaka stepped down as editor of The Computer Paper (which had now remodelled itself as HUB:

Digital Living). This made way for long-time TCP senior editor Megan Johnston to take the reigns, followed by Andrew Moore-Crispin.

"I was editing Total Gamer Magazine at the time which was Piccolo Publishing's first magazine and my first entry as an editor," Moore-Crispin recounts. "Before that I interned at CanadaComputes.com which was the website for The Computer Paper and the Computes! publications."

I asked Andrew how he did it — much a I did a year ago when I first started — and he told me how he managed to deal with the stress of being a new editor of a magazine that has a broad reach and high expectations.

"Late nights, a lot of late nights," he says with a laugh. "And a lot of help from the contributors," he adds. "When you get down to it I guess I was young to be running a magazine... but I'd have been an idiot not to take that opportunity, and it worked out. And I think I did a pretty good job."

Even before taking the job Moore-Crispin knew what he was getting into. He'd spent quite a bit of time reading The Computer Paper while he was in Centennial College

going to journalism school and was familiar with the paper even before he took over. "I knew The Computer Paper was a big, big thing. In college it was dream of mine to work there, and to take the reins was pretty heavy... I lost a lot of sleep. My first couple of weeks on the job were stressful, but it's amazing what you can do when you put your mind to it. You question 'am I ready, can I do this?' and then you just... do it."

And from there Moore-Crispin managed and edited HUB: Digital Living which would later be re-christened HUB: The Computer Paper. He maintains that while the first two months — the transition period between his taking over editorship from Megan Johnston — were tough, and the third month without Johnston's help was particularly difficult, it paid off in the long run.

"I still remember when we moved into our first actual office, right above a bar... a particularly loud bar," Moore-Crispin recalls. "And right through Thursday and Friday night production you would hear really loud music and feel it shaking the floors. My office was like a closet, very narrow. It was lined with shelves with games and press materials and all the stuff that you get with this job. It was also quite dark; Chris Cole, the Sales Manager at the time, dubbed it my Bat Cave."

Andrew has had a great deal of fun with this paper, as have I, and has have all of the former editors, to say nothing of all of the other contributors and those who have poured their energies into The Computer Paper and it's incarnations over the years.

"I think it's been a hell of a ride," Moore-Crispin says. "And while TCP's role has changed in the 20-plus years it's been published, it's still got something to say that people want to hear. But now only people that want to hear TCP will.

It's a 20-year legacy that has been through its up and downs and this is just another step in its evolution."

We've enjoyed our time here, serving you, our readers, and we hope that you've enjoyed waiting for each new issue of The Computer Paper to hit the streets each month. We all hope you choose to subscribe so we can turn the next page together.

Keep Computing!

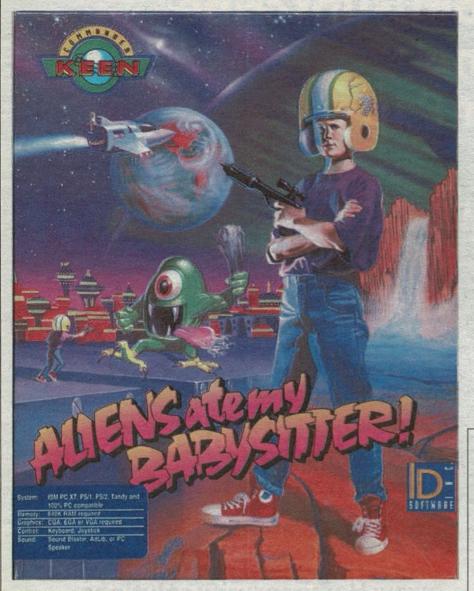
Signed, Dorian Nicholson and the rest of your friends from The Computer Paper, the regional Computes! series, HUB: Digital Living, www.hubcanada.com and all of the other contributors over the years. It's been a blast!





Software that Stands the Test of Time

Dr. File Finder on a quarter century of software



The personal computer, or "PC," was released by IBM in in 1982. At the time there was very little software for the early users to run. It didn't take long, however, for programmers to take up the cause of the PC and begin coding. Over the 27 years since the PC was released I've seen literally tens of thousands of software programs come and go. Some appeared and quickly disappeared. Others had some success and then disappeared when they couldn't keep up with their competition. A very few, however, have not only survived, but prospered. I'll take a brief look at six such products. All of the products I'm looking at ran under DOS.

Lotus 1-2-3

Lotus 1-2-3 was the brainchild of Mitch Kapor. Lotus 1-2-3 was the very first spreadsheet program for the PC and it was released in early 1983. It was Lotus that really got the PC a foothold in businesses. It was also the very first computer program to have television commercials. Lotus was immensely popular and powerful. Eventually it was overtaken by Excel and it sputtered a bit when trying to go from DOS to Windows. Lotus was bought by IBM and now, 26 years later, it's a thriving part of Lotus SmartSuite.

PK7IP

In 1985 the default method for compressing files was ARC by System Enhancement Associates. It created nice, neat ARC files. A 22-year-old fellow by the name of Phil Katz, however, thought compression could be better. Phil set about the task of making it that way. In 1986 Phil created his company, PKWARE, and released the first version of PKZIP. In the twenty-seven years that I've been evaluating software, this is the only product I've ever seen that became an "overnight sensation." Everyone wanted to have "ZIP" files because they made compressed files much smaller. Amazingly so, in fact. Phil Katz then made a decision that would impact all

of us who work in computers. He decided to dedicate the .ZIP extension and file format specification to the public domain. That helped the .ZIP file format to become a truly open standard on a global scale. Phil Katz died in 2000, but his company, his product and his legacy live on.

Commander Keen

In 1990 four guys with amazing talent were working for Softdisk, a game manufacturer. They were John Carmack, John Romero, Tom Hall, and Adrian Carmack. The first game they released was "Commander Keen" which was distributed through Apogee Software. Commander Keen and the technologies developed by Carmack and Romero would change both the shareware and the games market forever. In 1991 they became id Software and the rest, as they say, is history. The id "engines" power some of the most popular games in the history of the PC. Games like Doom, Quake, and others have sold staggering numbers and "Doom" even became a movie. While only John Carmack is still part of id, the games go on.

WinZip

In 1991, Nico Mak released the first copy of WinZip which was the first copy of "ZIP" for Windows. Because of the decision by Phil Katz to make it an open standard many "ZIP" programs followed. None of them, however, got the following that WinZip did. Nearly every software site you'd visit would recommend you download WinZip to unpack their program. An amazing thing about WinZip is that they never really enforced the concept of having to register the program. Despite this fact WinZip became hugely successful. People paid for it despite the fact that they weren't really required to. Ultimately, under Windows, WinZip became the program to use for

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handling ZIP files. A few years ago it was purchased by Corel Corporation and it's still going strong.

Paint Shop Pro

In 1992 a retiring airline pilot decided to create a little graphics program. The author was Bob Voight and the program at that time was called Paint Shop. It grew to became Paint Shop Pro. Paint Shop Pro became hugely popular because selling under the shareware marketing model it was very inexpensive compared to products like Photoshop. As time went on the program grew in functions and features. It grew in complexity and the company grew with it. A few years ago the company was purchased by Corel Corporation and Paint Shop Pro lives on.

Smartdraw

In 1994 a fellow named Paul Stannard approached me with his "shareware" program, Smartdraw. It was a cool program for creating charts and such. I was the first reviewer to write a review of Smartdraw. It's interesting to me that my review is still available on the Smartdraw website. Paul listened to his customers and the company grew. Fifteen years later Smartdraw has many employees and is used by half of the Fortune 500 companies.

Longevity

Out of these six programs all ran under DOS. Of these six programs, five were released under the "shareware" marketing model. Only Lotus 1-2-3 wasn't. Of these six programs only one was created by more than one person. Namely, Commander Keen from id Software. These people and these products showed the ability to adapt. To adapt to the change from DOS to Windows and some even to Linux. To adapt to the changing market. In the 1980s and early 1990s the Internet wasn't even a factor. These product changed and adapted to fit new markets and new users. They expanded and grew and their work is still with us today.

Is there a moral? Well, if there is I think it's that thousands of software programs can be released, but only a very few will continue on and on. These are the programs and the people behind them who can adapt to changing times and changing situations. Think about it. 27 years since the PC was released. 21 since

The Computer Paper first hit the streets. Hundreds of thousands of software products released since that time. Most of them are gone. The ones that persevere are the ones that appeal most to the public, that offer the features their users want, and that find ways to adapt both the software and the way they do business.

By Michael "Dr. File Finder" Callahan





Landing a Dream Job

Duane Hass, Webmaster, on the HUB: The Computer Paper metamorphosis

I love computers and technology. I have always loved computers and technology. My first real work experience was cutting lawns so that I could save enough money for the newly-released Commodore VIC-20. Prior to that, my friend and I would write computer programs in BASIC, which we would then execute verbally at recess, taking turns being the computer or user (yes, I am aware how nerdy that sounds.) The VIC-20 was replaced when my parents bought me a Commodore 64 which eventually turned into an x86 based PC, and so on, and so on. I often used to offer to babysit for a neighbor — not because I was the nurturing, care-giving sort, but rather because his

brother owned an Apple store and he always had the coolest new computers.

Of course, the love of computers and the love of technology tend to go hand in hand. It is the nature of the beast, the yin to the yang, the peanut butter with ketchup... well, the jury's still out on that last one. Like many kids growing up in the 70s and early 80s, I was fascinated by the world of consumer electronics and the increasingly accessible products that came along with it. Many nights were spent building gadgets with kits from Radio Shack — and then of course deconstructing and rebuilding them into Frankengadgets.

While some people like to browse through clothing stores, or home decorating stores, or hardware stores to look at what's available - whether they are in the market to buy or not - for me it was computer and electronic stores. I could spend a whole day just popping in and seeing where hard drive capacities had ballooned to, or prices had fallen to, or what features the newest GPU. boasted. Even though there were more and more such stores it could take a bit of time and energy and leave a person feeling quite drained at the end of the day.

And then I found The Computer
Paper. One day, while in a mall, I
happened by a newspaper stand with
a stack of magazines proclaiming
that they could scratch my itch for
technological information. I grabbed
one, tucked into my backpack and
went home. Less than one minute in,
I was sold. Cover to cover, this
wonderous publication held my
interest and gave me hours of
reading. Interesting articles, tech tips,
cutting edge information and ads.
Yes, I said ads. All those local
retailers advertising huge lists of their

products and prices — my favourite pastime had been transformed. I could now browse so much more information in a much shorter amount of time and not even have to get out of my chair! From that point on I would anxiously await the next month's delivery, making the 30 minute bus trip (one way, with a transfer) in order to pick up my new favourite magazine.

Sadly, one day I was no longer able to find HUB in its regular location. It seemed that my area was no longer being distributed to. Of course, had this story ended there, it would be decidedly tragic. Would I do that to you? Of course not.

During the course of my career as a Web Application Developer I had come into contact with Scott Piccolo, who needed some work done on the website www.hubcanada.com. While gathering the usual information from him it didn't take me long to realize that the website he needed work done to was the companion to none other than HUB: The Computer Paper! THIS was how early settlers heading west felt when they finally saw the blue of the Pacific. THIS was how Neil Armstrong felt when his life's work culminated with one small step. THIS was how Luke felt when Darth Vader spoke those fateful five words to him... (I am beginning to think I should quit after two comparisons.)

The few website touch-ups eventually grew into a full-time position for me at Piccolo Publishing. It seemed like a very good fit. I didn't have to learn to like my job — everything that I liked was my job. Of course it's not all fun and games, and the current transition is an example of having to grow along with an ever-changing world. However we have many great things in the works for both the paper, and the website which we truly believe our loyal readership will find enhances not only their experience as readers, but expands the relationship symbiotically as we try to provide helpful services that are beyond what people have come to expect.

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The (really) Last Byte

Andrew Moore-Crispin signs off with a reflection on what TCP means to him



The Computer Paper and all its many editions: East, West, Central, Greater Toronto and others too numerous to mention. HUB: Digital Living, HUB: The Computer Paper and its regional editions in Toronto, Ottawa, Montreal, Vancouver and elsewhere.

By any name, The Computer Paper has touched a lot of people over its more than 20-year history. Not least of all, me.

I served as Editor-in-Chief of HUB: The Computer Paper, starting when it was called HUB: Digital Living. In fact, I was laid off from Canada Computer Paper when the move from The Computer Paper to HUB: Digital Living was first enacted in, if memory serves, August, 2003. I was brought back on board some nine-months later when Piccolo Publishing got the license to publish the mag.

When I first started working with TCP, I was a fresh-faced graduate of the Centennial College Journalism – Print program. I graduated in the "digital age" but still in the days when you could go to school to study print journalism. On my resume, which has seen its share of updates over the years, I don't bother with the "– Print" suffix under the Education heading. It's too old-school. Consider the fact that I graduated in 2001 and it just goes to show how much things have changed in less than a decade. With that in mind, think how much has changed in the more than two decades since The Computer Paper was started.

Which segues nicely into a discussion of why we're donning the rose-coloured retrospective glasses in this, the 20th anniversary issue of HUB: The Computer Paper, albeit a year too late. As you have read in the previous pages, this is the last issue of HUB: The Computer Paper as we have known it. The free street box, library and computer / electronics store distribution model can no longer be sustained. HUB: The Computer Paper is going subscription only.

The paper was started by Doug Alder who, as we've also heard elsewhere in this issue, began publishing TCP in February, 1988. The Computer Paper was born on a kitchen table after Alder saw the computer magazines that were gaining momentum in the San Francisco Bay area. It's as logical a place as any to start a print publication dedicated to quite possibly the biggest evolution in human history, the lowly computer. The first issue hit the streets in February 1988. From humble beginnings, it enjoyed huge growth, buoyed by an unprecedented and, up to that point, unserved group of budding computer and technology enthusiasts.

My own involvement with The Computer Paper started in my last year of the aforementioned Journalism - Print program, which I feel duty-bound to say is an excellent program with an excellent faculty. And which also featured a web component that was of great interest to me (www.tobserver.com). I was approaching the internship phase, undertaken in the last semester of the last year of the three-year program. We were asked to list our top five choices for where we'd like to intern. I chose, in no particular order: The Computer Paper, Toronto Computes!, CanadaComputes.com, along with two other options that I can't remember and that I picked only to round out the requisite five choices. Little did I know that my top three picks were actually part of a greater whole: Canada Computer Paper, erstwhile publisher of The Computer Paper. And they were all run out of the same office in downtown Toronto.

I got a haircut, some new clothes and a portfolio case to show my newspaper clippings and web print-outs along with a bunch of 8 x 10 pictures I'd taken as Photo Editor of the college newspaper and went for my interview. The next

week, I started on what turned out to be a fateful path as intern Staff Writer for CanadaComputes.com, approximately one year after the dot-com bubble reached critical mass and shortly after the CanadaComputes.com staff that used to number in the 20s was slashed to one. Two, if you included this new, unpaid intern. The other member of staff was Jessica Malone, to whom I owe a great deal of thanks... and who I still occasionally meet for lunch to catch up.

Several years and an untold number of printed pages later, I'm happy to be asked back to help out with this The Computer Paper send-off.

The publication has grown and shrunk, changed and evolved over its 20 plus years. It's covered the growth of the Internet and the World Wide Web, it's covered every edition of Windows that has come out from 2.0 through Windows 7, along with alternative operating systems, many of which it turns out were destined for obscurity. TCP documented the rise of the laptop computer from luggable to expensive luxury to business staple to mass market availability and acceptance. Monitored the rise of the BlackBerry from two-way paging curiosity to one of Canada's biggest tech successes. The PDA from palm-sized organizer to do-it-all smartphone. As both Sean Carruthers and Doug Alder hint elsewhere in this issue, The Computer Paper was the resource for Canadian tech buyers. Before web searches, before online became organized and monetized. The Computer Paper predates big-box electronics retailers. It predates Google, it certainly predates Facebook, Twitter, Friendster et al.

It predates the web as we know it.

Now, more than 20 years after it started, HUB: The Computer Paper has reached another stage in its metamorphosis. This is the last issue of HUB: The Computer Paper you'll pick up from a street box. It's not necessarily the last issue of HUB: The Computer Paper you'll see though. If you're interested in getting HUB: The Computer Paper, the team that works on the publication wants to make sure you can. If you express interest in subscribing by signing up at www.hubcanada.com/subscribe, HUB: The Computer Paper will continue to publish and you'll continue to receive it each month.

It's been a great ride. For my part, I'd like to thank everyone that has contributed to TCP's 20+ year history and to this issue: Doug Alder for having the foresight to start it, Graeme Bennett for helping to organize it, David Tanaka for welcoming me into it, Jessica Malone for giving me a chance and acting as a mentor early in my careers and last but not least, Dorian Nicholson for helping to continue the legacy. I'd also like to say a sincere thanks to Scott Piccolo for handing me the editorial reigns when I was probably too green to hold them properly, Steve Stoner for making us look good and for being a great colleague and friend as well the too many people to mention that have shaped this paper over its 20+ years.

And most of all, to you for reading.

Andrew Moore-Crispin Editor 2004 - 2008

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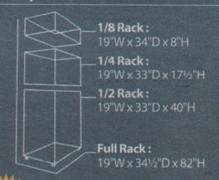
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